0625

#4



OIPE

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/074,956

DATE: 06/17/2002 TIME: 12:48:48

Input Set : A:\08191-022001.TXT

Output Set: N:\CRF3\06172002\J074956.raw

```
4 <110> APPLICANT: Hedley, Mary Lynne
     7 <120> TITLE OF INVENTION: METHODS OF TREATING BLADDER DISORDERS
     10 <130> FILE REFERENCE: 08191-022001
     12 <140> CURRENT APPLICATION NUMBER: 10/074,956
C--> 13 <141> CURRENT FILING DATE: 2002-06-10
     15 <150> PRIOR APPLICATION NUMBER: 60/268,175
     16 <151> PRIOR FILING DATE: 2001-02-12
     18 <160> NUMBER OF SEQ ID NOS: 29
     20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     22 <210> SEQ ID NO: 1
     23 <211> LENGTH: 19
     24 <212> TYPE: DNA
     25 <213> ORGANISM: Homo sapiens
     27 <400> SEQUENCE: 1
                                                                               19
     28 tccatgtcgc tctgatgct
     30 <210> SEQ ID NO: 2
     31 <211> LENGTH: 20
     32 <212> TYPE: DNA
     33 <213> ORGANISM: Homo sapiens
     35 <400> SEQUENCE: 2
                                                                                20
     36 tccatgtcgt tcctgatgct
     38 <210> SEQ ID NO: 3
     39 <211> LENGTH: 24
     40 <212> TYPE: DNA
     41 <213> ORGANISM: Homo sapiens
     43 <400> SEQUENCE: 3
                                                                                24
     44 tcgtcgtttt gtcgttttgt cgtt
     46 <210> SEQ ID NO: 4
     47 <211> LENGTH: 13
     48 <212> TYPE: PRT
     49 <213> ORGANISM: Homo sapiens
     51 <400> SEQUENCE: 4
     52 Ser Tyr Ser Met Glu His Phe Arg Trp Gly Lys Pro Val
                         5
     55 <210> SEQ ID NO: 5
     56 <211> LENGTH: 3
     57 <212> TYPE: PRT
     58 <213> ORGANISM: Homo sapiens
     60 <400> SEQUENCE: 5
     61 Lys Pro Val
     62 1
     64 <210> SEQ ID NO: 6
```

65 <211> LENGTH: 5

Input Set : A:\08191-022001.TXT

```
66 <212> TYPE: PRT
 67 <213> ORGANISM: Homo sapiens
 69 <400> SEQUENCE: 6
 70 Glu His Phe Arg Trp
 71 1
 73 <210> SEQ ID NO: 7
 74 <211> LENGTH: 52
 75 <212> TYPE: PRT
 76 <213> ORGANISM: Homo sapiens
 78 <400> SEQUENCE: 7
 79 Met Pro Arg Ser Cys Cys Ser Arg Ser Gly Ala Leu Leu Leu Ala Leu
                  5
                                    10
 81 Leu Leu Gln Ala Ser Met Glu Val Arg Gly Trp Cys Leu Glu Ser Ser
 82 20
                               25
 83 Gln Cys Gln Asp Leu Thr Thr Glu Ser Asn Leu Leu Glu Cys Ile Arg
 84 35
                          40
 85 Ala Cys Lys Pro
 86 50
 88 <210> SEQ ID NO: 8
 89 <211> LENGTH: 70
 90 <212> TYPE: PRT
 91 <213> ORGANISM: Artificial Sequence
 93 <220> FEATURE:
 94 <223> OTHER INFORMATION: Synthetically generated peptide
 96 <400> SEQUENCE: 8
 97 Met Pro Arg Ser Cys Cys Ser Arg Ser Gly Ala Leu Leu Ala Leu
                   5
                                    10
 99 Leu Leu Gln Ala Ser Met Glu Val Arg Gly Trp Cys Leu Glu Ser Ser
 100 20
 101 Gln Cys Gln Asp Leu Thr Thr Glu Ser Asn Leu Leu Glu Cys Ile Arg
                              40
 103 Ala Cys Lys Pro Arg Glu Gly Lys Arg Ser Tyr Ser Met Glu His Phe
 104 50
                           55
 105 Arg Trp Gly Lys Pro Val
 106 65
108 <210> SEQ ID NO: 9
 109 <211> LENGTH: 26
 110 <212> TYPE: PRT
 111 <213> ORGANISM: Homo sapiens
 113 <400> SEQUENCE: 9
 114 Met Pro Arg Ser Cys Cys Ser Arg Ser Gly Ala Leu Leu Leu Ala Leu
                 5
                              10
 116 Leu Leu Gln Ala Ser Met Glu Val Arg Gly
        20
 119 <210> SEQ ID NO: 10
 120 <211> LENGTH: 25
 121 <212> TYPE: PRT
 122 <213> ORGANISM: Homo sapiens
 124 <400> SEQUENCE: 10
```

Input Set : A:\08191-022001.TXT

```
125 Met Ala Ile Ser Gly Val Pro Val Leu Gly Phe Phe Ile Ile Ala Val
                                       10
                    5
127 Leu Met Ser Ala Gln Glu Ser Trp Ala
128
         20
130 <210> SEQ ID NO: 11
131 <211> LENGTH: 26
132 <212> TYPE: PRT
133 <213> ORGANISM: Homo sapiens
135 <400> SEQUENCE: 11
136 Trp Cys Leu Glu Ser Ser Gln Cys Gln Asp Leu Thr Thr Glu Ser Asn
                 5
                                        10
137 1
138 Leu Leu Glu Cys Ile Arg Ala Cys Lys Pro
              20
141 <210> SEQ ID NO: 12
142 <211> LENGTH: 5
143 <212> TYPE: PRT
144 <213> ORGANISM: Homo sapiens
146 <400> SEQUENCE: 12
147 Lys Phe Glu Arg Gln
148 1
                  5
150 <210> SEQ ID NO: 13
151 <211> LENGTH: 5
152 <212> TYPE: PRT
153 <213> ORGANISM: Homo sapiens
155 <400> SEQUENCE: 13
156 Gln Arg Glu Phe Lys
157 1
159 <210> SEQ ID NO: 14
160 <211> LENGTH: 5
161 <212> TYPE: PRT
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Linker sequence
167 <400> SEQUENCE: 14
168 Gly Gly Val Gly Gly
169 1
171 <210> SEQ ID NO: 15
172 <211> LENGTH: 247
173 <212> TYPE: DNA
174 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
177 <221> NAME/KEY: CDS
178 <222> LOCATION: (23)...(232)
180 <223> OTHER INFORMATION: Synthetic construct
182 <400> SEQUENCE: 15
183 aagettgege getgeetgga ag atg eeg aga teg tge tge age ege teg ggg
                                                                           52
                             Met Pro Arg Ser Cys Cys Ser Arg Ser Gly
184
                                              5
                                                                  10
                              1
185
                                                                          100
 187 gcc ctg ttg ctg gcc ttg ctg ctt cag gcc tcc atg gaa gtg cgt ggc
```

Input Set : A:\08191-022001.TXT

```
188 Ala Leu Leu Leu Ala Leu Leu Gln Ala Ser Met Glu Val Arg Gly
                                        20
                    15
191 tgg tgc ctg gag agc agc cag tgt cag gac ctc acc acg gaa agc aac
                                                                        148
192 Trp Cys Leu Glu Ser Ser Gln Cys Gln Asp Leu Thr Thr Glu Ser Asn
                30
                                    35
195 ctg ctg gag tgc atc cgg gcc tgc aag ccc cgc gag ggc aag cgc tcc
                                                                        196
196 Leu Leu Glu Cys Ile Arg Ala Cys Lys Pro Arg Glu Gly Lys Arg Ser
                                50
       45
                                                                        242
199 tac tcc atg gag cac ttc cgc tgg ggc aag ccg gtg taaggatccc
200 Tyr Ser Met Glu His Phe Arg Trp Gly Lys Pro Val
                                                                        247
203 tcgag
205 <210> SEQ ID NO: 16
206 <211> LENGTH: 10
207 <212> TYPE: PRT
, 208 <213> ORGANISM: Homo sapiens
210 <400> SEQUENCE: 16
211 Ser Gly Gly Gly Gly Ser Gly Gly Gly
214 <210> SEQ ID NO: 17
215 <211> LENGTH: 11
216 <212> TYPE: PRT
217 <213> ORGANISM: Homo sapiens
219 <400> SEQUENCE: 17
220 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
221 1
223 <210> SEQ ID NO: 18
224 <211> LENGTH: 20
225 <212> TYPE: PRT
 226 <213> ORGANISM: Homo sapiens
 228 <400> SEQUENCE: 18
 229 Ser Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
 230 1
 231 Gly Gly Gly
232
               20
 234 <210> SEQ ID NO: 19
 235 <211> LENGTH: 17
 236 <212> TYPE: PRT
 237 <213> ORGANISM: Homo sapiens
 239 <400> SEQUENCE: 19
 240 Ser Ser Ser Ser Gly Ser Ser Ser Gly Ser Ser Ser Ser Gly Ser
                                        10
 241 1
                    5
 242 Pro
 245 <210> SEQ ID NO: 20
 246 <211> LENGTH: 18
 247 <212> TYPE: PRT
 248 <213> ORGANISM: Mus musculus
 250 <400> SEQUENCE: 20
 251 Met Lys Trp Val Thr Phe Leu Leu Leu Leu Phe Val Ser Gly Ser Ala
```

Input Set : A:\08191-022001.TXT

```
252 1
                                      10
                                                          15
253 Phe Ser
256 <210> SEQ ID NO: 21
257 <211> LENGTH: 18
258 <212> TYPE: PRT
259 <213> ORGANISM: Homo sapiens
261 <400> SEQUENCE: 21
262 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala
263 1
264 Tyr Ser
267 <210> SEQ ID NO: 22
268 <211> LENGTH: 6
269 <212> TYPE: PRT
270 <213> ORGANISM: Homo sapiens
272 <400> SEQUENCE: 22
273 Arg Gly Val Phe Arg Arg
274 1
276 <210> SEQ ID NO: 23
277 <211> LENGTH: 195
278 <212> TYPE: PRT
279 <213> ORGANISM: Mus musculus
281 <400> SEQUENCE: 23
282 Glu Ala His Lys Ser Glu Ile Ala His Arg Tyr Asn Asp Leu Gly Glu
283 1
                   5
                                      10
284 Gln His Phe Lys Gly Leu Val Leu Ile Ala Phe Ser Gln Tyr Leu Gln
            20
                                  25
286 Lys Cys Ser Tyr Asp Glu His Ala Lys Leu Val Gln Glu Val Thr Asp
287 35
                              40
288 Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Ala Asn Cys Asp Lys
                          55
                                              60
290 Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Ala Ile Pro Asn Leu
                      70
                                         75
292 Arg Glu Asn Tyr Gly Glu Leu Ala Asp Cys Cys Thr Lys Gln Glu Pro
                  85
                                      90
294 Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asn Pro Ser Leu
295 100
                                 105
                                                    110
296 Pro Pro Phe Glu Arg Pro Glu Ala Glu Ala Met Cys Thr Ser Phe Lys
297 115
                              120
298 Glu Asn Pro Thr Thr Phe Met Gly His Tyr Leu His Glu Val Ala Arg
299 130
                          135
                                             140
300 Arg His Pro Tyr Phe Tyr Ala Pro Glu Leu Leu Tyr Tyr Ala Glu Gln
301 145
                     150
                                         155
302 Tyr Asn Glu Ile Leu Thr Gln Cys Cys Ala Glu Ala Asp Lys Glu Ser
                  165
                                     170
304 Cys Leu Thr Pro Lys Leu Asp Gly Val Lys Glu Lys Ala Leu Val Ser
305
                                  185
306 Ser Val Arg
307
           195
309 <210> SEQ ID NO: 24
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/074,956

DATE: 06/17/2002

TIME: 12:48:49

Input Set : A:\08191-022001.TXT

Output Set: N:\CRF3\06172002\J074956.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date